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| 10/727,727 | 12/04/2003 | Rainer Hoefer | C 2321 COGG | 7177 |
| 23657 7590 1006/2008 FOX ROTHSCHILD LLP 1101 MARKET STREET | | | EXAMINER | |
| | | | GRAY, JILL M | |
| PHILADELPH | HA, PA 19107 | | ART UNIT | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/727,727 HOEFER ET AL Office Action Summary Examiner Art Unit Jill Grav 1794 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 01 July 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1.4-6.8-13 and 15 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1,4-6,8-13 and 15 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

| 1 | Notice of References Cited (PTO-892) | 1 | Interview Summary (PTO-413) | Paper No(s)/Mail Date | 1 | Paper N

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DETAILED ACTION

Response to Amendment

The rejection of claims 13-15 under 35 U.S.C. 112 second paragraph as being indefinite is moot in view of applicants' amendment.

Claim Rejections - 35 USC § 103

- The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- Claims 1, 4-6, 8-13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al., 5,633,042 (Nakamura) in view of Hoefer et al., US 2004/0087684 A1 (Hoefer), for reasons of record.

Claims 6, 8, 10, 12, and 15 are product-by-process claims. "[E] ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." MPEP 2113.

Nakamura teaches method of coating a glass substrate comprising providing a glass substrate, applying to the glass substrate a coating composition comprising a solventless bisphenolic epoxy and a hardener and curing the coating composition. The bisphenolic epoxy of Nakamura has a viscosity within the instant claimed range. See entire document, and for example, column 6, lines 10-20, and Examples. Nakamura does not specifically teach that the epoxy is the reaction product of epichlorohydrin and

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either bisphenol A or bisphenol F, or that the hardener is water-dilutable or that his composition contains water.

Hoefer '684 teaches coating compositions comprising an epoxy resin that is a reaction product of epichlorohydrin and a component selected from bisphenol A and bisphenol F, a water-dilutable epoxy resin hardener and water. See abstracts. Hoefer '684 does not specifically teach a method of coating a glass substrate with said coating composition.

While Nakamura does not specifically teach that his epoxy is the reaction product of epichlorohydrin and either bisphenol A or bisphenol F, the fact that he teaches a bisphenolic epoxy would have provided a suggestion to the skilled artisan for the type of epoxy resin contemplated by applicants. Moreover, there is no clear showing on this record of criticality that is directly related to the instant epoxy resin. Accordingly, the compositions of Nakamura and Hoefer '684 are sufficiently close that one of ordinary skill in the art would immediately envisage substituting the compositions taught by Nakamura with one of those taught by Hoefer '684. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the method of coating a glass substrate as taught by Nakamura by using the compositions taught by Hoefer '684 with the reasonable expectation of success.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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 Claims 6, 8, 10, 12, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura et al., 5.633.042 (Nakamura), for reasons of record.

As set forth above, claims 6, 8,10, 12, and 15 are product-by-process claims.

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." MPEP 2113.

Accordingly, the examiner has interpreted these claims to embrace the end product of a glass fiber coated with a cured epoxy resin.

Nakamura, as set forth above, teaches glass fiber substrates coated with a composition comprising bisphenolic epoxy resin and a hardener and curing said coated substrate to result in the end product of a glass fiber cloth coated with a cured epoxy resin. Hence, the teachings of Nakamura anticipate the invention as claimed in product-by-process claims 6, 8, 10, 12 and 15. There is no evidence on this record of a patentably distinct end product from the prior art products.

Therefore the teachings of Nakamura anticipate the invention as claimed in present claims 6, 8, 10, 12, and 15.

Response to Arguments

 Applicant's arguments filed July 1, 2008 have been fully considered but they are not persuasive.

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Applicants argue that Nakamura does suggest a method of coating a glass fiber woven cloth substrate with an epoxy resin composition but does not suggest that the bisphenolic epoxy resin is a reaction product of epichlorohydrin and bisphenol A and/or bisphenol F and the reference nowhere teaches the use of the specific water-dilutable epoxy resin hardeners of applicants' compositions or the use of water, a compulsory component of applicants' compositions, and therefore, Nakamura neither teaches nor reasonably suggests either applicants' composition or applicants' process.

In this regard, it is the examiner's position that the instant claimed method comprising the steps of providing a glass substrate, applying a solventless epoxy resin coating composition to that substrate, and curing the coating. The process of Nakamura clearly teaches providing a glass substrate, applying an epoxy resin coating composition to that substrate and curing the coating. As to the specific epoxy resin composition, the combined teachings of the prior art would render obvious the instant claimed method.

Applicants argue that combination of Nakamura with Hoefer is neither obvious nor does it cure the deficiencies of the Nakamura reference and that the examiner cannot use hindsight in order to modify the Nakamura's process for coating a glass substrate.

6. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was

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within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Applicants' argue that Nakamura does not disclose the specific reaction product of applicants' invention or the presence of water and the specific water-dilutable hardeners of applicants' coating compositions, and therefore, cannot teach the coated glass fibers or composition materials of claims 6, 8, and 10, and that the curing temperatures of Nakamura distinguish it from applicants' claim 12.

In this regard, as set forth previously, claims 6, 8, 10, and 12 are product-byprocess claims wherein patentability relies solely on the product. Applicants' have provided no evidence of a patentably distinct end product from the prior art products.

No claims are allowed.

Conclusion

 Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill Gray whose telephone number is 571-272-1524.

The examiner can normally be reached on M-Th and alternate Fridays 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton I. Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jill Gray Primary Examiner Art Unit 1794

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